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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,817	11/08/2000	Jose Remacle	VANM160.001A	2892

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EXAMINER
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SISSON, BRADLEY L

ART UNIT	PAPER NUMBER
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1634

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/582,817

**Applicant(s)**

REMACLE, JOSE

**Examiner**

Bradley L. Sisson

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 30-34, 40, 41, 45, 49 and 51-64 is/are pending in the application.
- 4a) Of the above claim(s) 32, 33, 49 and 51-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30, 31, 34, 40, 41, 45 and 64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 April 2005 has been entered.

### ***Election/Restrictions***

2. Claims 32-33, 49, and 51-63 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 24 May 2002.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

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do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 30, 31, 34, 40 41, 45, and 64 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 2002/0058242A1 (Demers).

6. For convenience, claim 30, the sole independent claim under consideration, is reproduced below.

**30. (Currently amended) A method for a detection and/or quantification of a target molecule present in a sample, comprising the steps of:**

**allowing binding between said target molecule and a capture molecule fixed upon a side of the surface of a solid support, said solid support consisting of a compact disc (CD) or digital video disc (DVD) comprising registered data that can be read by a CD reading device,**

**wherein said binding occurs in areas separated from areas comprising registered data,**

**wherein said CD or DVD is not rotating on its axis and does not comprise microchannels,**

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wherein said microchannels are not grooves;

wherein capture molecules are located on areas of said disc that do not comprise any grooves or registered data, and

wherein the target and capture molecules are nucleic acid molecules or proteins;

removing unbound target molecules;

treating said CD or DVD in order to obtain a detectable signal resulting from the binding of the target molecule and said capture molecule,

wherein said binding results in a precipitate on said CD or DVD,

wherein said CD or DVD is not rotating on its axis;

detecting said signal, wherein said signal is not obtained through cleavage of the capture molecule, and

reading the registered data by a first reading device and reading by a second reading device the signal resulting from the binding between said target molecule and said capture molecule, wherein said registered data is binary data which comprises characteristics and position of capture molecules fixed upon specific areas of said CD or DVD or interpretation of the signal resulting from the binding between the target and the capture molecules, wherein said readings being done when the disc is rotating on its axis in an apparatus comprising the two different reading devices.

7. Demers, paragraph 0038, disclose a method whereby nucleic acids (applicant's "target molecule") are detected wherein said method comprises using a compact disc (CD). The CD is designed such that binding is allowed between the target molecule and a capture molecule fixed upon a side of the surface of the CD that has immobilized to its surface.
8. Demers, paragraph 0040, teaches using the CD in hybridization reactions as well as in binding assays.
9. Demers, paragraph 0046, teaches that the target molecule-capture molecule complex may be detected through the use of a reporter molecule. Specifically disclosed is the use of reporting

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enzymes, insoluble dyes, colloidal silver, etc. that can result in an opaque precipitate. Also disclosed therein is the use of sensors that can either detect the color of the signal, a change in reflectance, and/or interferometry

10. Demers, paragraph 0020, discloses using a CD that further comprises registered data that is written using any of the available CD data formats. The aspect of using one reader for the registered data and a second reader for transmissive sensing speaks directly to using two different readers.

11. For the above reasons, and in the absence of convincing evidence to the contrary, the invention of claims 30, 31, 34, 40 41, 45, and 64 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US2002/0058242A1 (Demers).

### *Conclusion*

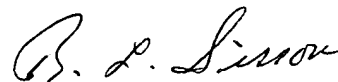
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley L. Sisson whose telephone number is (571) 272-0751. The examiner can normally be reached on 6:30 a.m. to 5 p.m., Monday through Thursday.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones can be reached on (571) 272-0745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bradley L. Sisson  
Primary Examiner  
Art Unit 1634

BLS  
28 February 2005